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ABSTRACT

The increased mobility of undergraduate students moving from one campus to another in Massachusetts has presented problems for admissions and transfer officers of 2- and 4-year institutions. At a meeting of these officers it was decided to establish a committee to collect transfer student data on a state-wide basis and to conduct state-wide workshops to deal with the problems discovered. A total of 26 colleges and 15,171 freshman and sophomore students participated in the study. Data dealt with student characteristics, aspirations, reasons for attending college, living arrangements, plans for transfer, financial aid, vocational counseling, and major field of study. Recommendations, based on the findings, were: (1) higher educational institutions in the state should confer regarding the transfer space dilemma; (2) the committee should develop and publish a guideline for articulation; (3) 4-year institutions should publish a brochure for "pre-transfer" students; (4) state agencies should study and establish subject matter articulation guides; (5) 4-year institutions should re-assess financial aid policies for transfers; (6) 2-year colleges should emphasize more career development guidance; (7) central offices and institutions should maintain institutional research programs; and (8) 2-year colleges should investigate the possible need of better serving the "over-30" student group. (RN)

Study of Massachusetts Two-Year College Students: Implications for Massachusetts Four-Year Colleges and Universities

MASSACHUSETTS STATE TRANSFER ARTICULATION COMMITTEE

August 1972

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STATE TRANSFER ARTICULATION COMMITTEE

A Descriptive Study of the Characteristics, Educational Goals, and Transfer Plans of Massachusetts Two-Year College Students: Implications for Massachusetts' Four-Year Colleges and Universities

Ernest W. Beals, Chairman

August, 1972

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MASSACHUSETTS

STATE TRANSFER ARTICULATION COMMITTEE

Introduction: In September 1971, twenty-one Massachusetts educators, most of whom were admissions officers and transfer officers from two and four-year public and private colleges, came together to discuss the problems concerning transfer students and the transfer articulation process. All agreed that immediate attention on a state-wide basis must be given to this phenomenon that has just recently come upon the higher education scene in Massachusetts.

Since there was no formal state level organization specifically designed to deal with the transfer student situation, the group present established itself as the "State Transfer Articulation Committee" (STAC), and elected Dr. Ernest W. Beals of the University of Massachusetts, Amherst, as chairman, and Mr. F. Donald Costello of the University of Massachusetts, Boston, as secretary. (See membership roster - Appendix A). At this organizational meeting, it was decided that at least two major projects be undertaken in the immediate future: one was the collection of transfer student data on a state-wide basis, and the other was to conduct state-wide workshops on the general problems involved in transfer articulation. Both of these objectives were met during the first year of STAC's operation. This report will concern itself with only the data collection project.

The funding of the project was a joint effort on the part of the University of Massachusetts, Amherst, the community college system, and the state college system.

Statement of the problem: The mobility of students moving from one campus to another at the undergraduate level has "caught the State of Massachusetts unaware." Only within the last five or six years has there been heavy involvement with transfer students in this state. However, it has now reached a magnitude of major

proportion. In a survey of new student vacancies in Massachusetts for September, 1972, conducted by STAC, it was found that 10,100 vacancies were being reserved for transfers at fifty-four, four-year colleges in Massachusetts, and 36,985 reserved for freshmen. This meant that twenty-two per cent of all new student vacancies were intended for transfers.

Due to the lack of previous experience in dealing with the two-year college transfer students, relatively little is known about them. This creates all kinds of problems for both the sending and receiving institutions. Major questions that need to be resolved include: 1) Are there enough vacancies to accommodate those wishing to transfer? 2) What criteria should be used in the admission of these transfer students by four-year colleges? 3) Are there discriminating admissions policies for transfer applicants? 4) At what institutions are there undue transfer admissions strains? 5) Do transfer students receive adequate financial aid? 6) What are the curriculum trends of these students? 7) What are the performance records of two-year college transfers? 8) Why do they wish to transfer? 9) Where do transfer students come from? 10) Where do they go? 11) Should "upper division" colleges be developed to accommodate the ever-expanding number of two-year college students who wish to transfer?

Before rational decisions can be made at either an individual institution or at the state level, pragmatic data needs to be obtained. Too often important educational policies are made by high ranking officials without the benefit of hard core data.

The STAC committee members felt it mandatory that common data on transfer students be collected so that individual institutions and state agencies would have a better understanding of the transfer student and the concomitant ramifications upon higher education in Massachusetts.

Procedures used in conducting the study: The State of Massachusetts has many private and public two and four-year colleges with significantly different characteristics. This causes problems in gathering common information about students at all schools. After considerable discussion, it was decided to attempt

to gather data by means of a "common data collection instrument." Since it would be most difficult to get this information on a wide-scale basis from individual college administrators, it was determined to obtain the information from the students themselves. This would create a common base of reference no matter what kind of college a student was attending. A sub-committee was appointed to devise the collection instrument.

The collection instrument: The sub-committee used as a basis a data collection instrument that had been in use at the University of Massachusetts-Amherst for the previous three years. This was a one-page marked sense optical scan questionnaire filled out entirely by the students.

The sub-committee met several times and completed the instrument form (see Appendix B) so that the responses of the student would be applicable no matter what kind of school he represented. A separate direction sheet was also devised with the top half of the page for general directions and the bottom half of the page left blank so that the individual institution could include any particular directions relevant to the administration of the questionnaire deemed necessary by that institution. The data collection instrument was completed by early December, 1971.

Administering the data collection instrument: Administration of the data collection instrument was a vital aspect of the total project. Much work had to be done prior to the administration. All two-year college transfer officers in Massachusetts were contacted and were asked to participate in the project. Twenty-six, two-year colleges (13 public and 13 private) agreed to participate (see Appendix C). In mid-December a seminar was held at Stonehill College in North Easton, Massachusetts. There were two objectives to the seminar. The first was to bring admissions personnel of Massachusetts' public and private two and four-year colleges together to tell them of STAC as an organization and to discuss the transfer situation in general. The second objective was to explain to them the STAC transfer data collection instrument and to instruct them in its use.

STAC originally ordered 15,000 "Transfer Student Survey" forms. This number was to accommodate second year transfer program students at two-year colleges in Massachusetts. However, at the initial orientation program, college representatives requested that the questionnaire be given to all two-year college students, as that data would be more meaningful than just information on second year students in transfer programs. This necessitated ordering an additional 15,000 two-year college forms.

In most instances, the questionnaires were administered at spring registration. However, at those two-year colleges where the forms were not available in time for spring registration, and at those colleges who administered the forms on an individual basis, the return ratio was lower. The total returns numbered 15,171.

Limitations of the study: It should be realized that the students' responses were voluntary and reflect their feelings at that point in time. (Spring semester, 1972)

The number (N=15,171) of subjects in the total population include two-year college students with a 60% freshman and 40% sophomore ratio. Also, both students who plan to transfer and those in non-transfer programs are included together in the total population analysis.

In some cases, the questionnaire forms were not made available to the colleges until after spring registration time, thus creating a problem of administration of the questionnaire to a large portion of the student body. Those community colleges reporting relatively small number (such as Quinsigamond) were in all liklihood victims of this condition.

It should be noted that not every student in the study answered every question. This accounts for the variance in number of responses to each question.

Analysis of the data: Decks of keypunched IBM cards were generated by the optical scanning scoring process indicating on a print-out sheet the number of responses to each part of the question and the percentages those responses represented.

This process was done individually for each participating college, combined private colleges, combined public colleges, and summarily for all colleges combined. Separate data were given in four categories: 1) total population, 2) second year students who answered "yes" on plan to transfer question, 3) first year students who answered "yes" on plan to transfer question, and 4) those who answered "no" on plan to transfer question.

Each individual college received a print-out summary of the tabulations with numbers and percentages shown, and broken into the four categories indicated above. It was suggested that their own college personnel summarize the findings narratively for distribution within their own institution. Each institution also received its own deck of keypunched cards so that it could conduct, if it wished, individual studies of its own based on that data.

Summaries of the total combined population were made in order to look at the state-wide characteristics. Also separate summaries were made by "public" and "private" colleges. Since the data is primarily descriptive in nature, no in-depth technical research techniques were applied to the data.

Findings: In review of the total 26 two-year college population (N=15,171) that responded to the questionnaire, some rather interesting and enlightening characteristics appeared:

Age: It appears that the two-year colleges in Massachusetts serve for the most part a young population with 59% under the age of 20, 28% between 20 and 23 years, 9% between 24 and 29 years, and 4% over 30 years of age. This reflects the fact that 75% of the population entered college immediately upon graduation from secondary school. It would seem that the two-year colleges in their day divisions are either not in demand by the "over 30" crowd, or the colleges are not meeting their needs. Since a high proportion of any community consists of people over 30 years of age, further study should be made by individual two-year colleges as to the needs and extent of services that should be rendered these people.

Sex: The ratio of male to female was relatively even. Fifty-two percent of the population in the study were males and 48% were females, which indicates a

reasonably good balance. In general, there appears to be little admissions discrimination by the sex of the applicant on the part of the two-year colleges.

Marital status: The vast majority of two-year college students are single as only 10% are married.

Residence: Massachusetts two-year colleges enroll mostly Massachusetts' residents with 85% in-staters, 14% out-of-staters, and 1% foreign. As one would expect, the public community colleges had a significantly lower percentage of out-of-staters (3%) than did the private colleges (39%).

Veteran status: Of the total population, 14% were veterans, with a slightly higher percentage (16%) of them in the public community college system.

Immediately after high school: As was indicated earlier, 75% of the participants in the study went directly from high school to college, while 15% joined the world of work, 7% entered the service, and 3% travelled or carried out other activities.

Plans to transfer: As one might imagine, this was one of the more important findings of the study. Fifty-five per cent of the participants said they do plan to transfer to a four-year college, only 25% indicated that they do not plan to transfer, and a significant 20% are undecided. The comparison of public and private colleges percentages shows that a higher percentage plan to transfer (60%) from public colleges compared with (44%) from private colleges. Apparently, the two-year colleges are serving the role of the lower division function of a four-year baccalaureate program. Close scrutiny should be given by higher education state agencies and individual institutions as to how best to accommodate this high proportion of students who wish to transfer to four-year institutions.

Plans to attain a two-year degree: It was interesting to find that of the 80% who planned to obtain an associate degree, 50% of them expected to get an associate in science (A.S.) degree, and 30% were seeking an associate in arts (A.A.) degree. Twenty per cent did not plan to get an associate degree.

Educational aspirations: The educational aspirations of the students in the study are rather high with 28% aiming for an associates degree, 41% for a bachelors degree, 20% for a masters degree, and 5% for a doctorate. It seems that the vast

majority of students view the community college as a stepping stone to upper-division and post-upper division work.

Reason for attending present college: Apparently there is acceptance of the two-year college by students as a viable institution to attend. Forty-two per cent said that they preferred to attend a two-year institution, although there was a higher percentage of private college students preference (53%) than in public two-year colleges (36%). Apparently students prefer to start their baccalaureate degree study in two-year colleges because these colleges generally are relatively small in size and do not pose the monolithic picture students envision the huge multi-campus colleges and universities to be. They see the two-year college as a "more comfortable and supportive" type institution in which to begin their study. Some students choose the two-year college because it provides for academic exploratory opportunities before deciding upon an upper-division level major. Twelve per cent said that they could not afford a residence college, eleven per cent said that they felt they would not be accepted into a four-year college, and nine per cent said that they were not accepted into a four-year college. For students who might be marginal admissions candidates to four-year institutions, many two-year colleges provide the opportunity for these students to establish themselves as worthy candidates after successful completion of a two-year transfer program. Seven per cent indicated that they needed to be near home, and the remaining 20% said that they had other reasons.

Ever attended any other college: Twenty-one per cent of the population attended at some time other colleges. Eight per cent attended four-year colleges, a portion of which can be considered as "retreads" or in more appropriate terms, providing opportunities for four-year college dropouts to redirect their educational plans. Five per cent attended other two-year colleges, and 8% attended summer schools or evening divisions. Only 4% indicated that they came to their present college because of financial problems.

Living arrangements preferred upon transfer: One of the more interesting findings of this study concerned the problem of housing for transfer students. A dichotomy exists in this regard among colleges. There are many four-year colleges

who are expecting transfer students to fill not only academic spaces but also residence hall vacancies. These are primarily the larger institutions where there is a heavy turnover of undergraduates. On the other hand, there are many colleges that can in no way guarantee housing on campus for the transfer student. Only 26% of the transfer population indicated that they preferred to live in residence halls on campus, and another 4% preferred to live in sororities or fraternities. Forty per cent indicated that they wished to live in off-campus housing, and another 30% preferred to commute. It seems important to both the applicant and the receiving institution to make known in its literature the nature of housing available to transfer students. The figures coincide with the current national trend that the vast majority of students prefer to live off-campus rather than in residence halls.

Financial aid upon transfer: Forty-four per cent of all two-year students in the study indicated that they will need financial aid if they transfer to a public college or university, contrasted to 63% if they transfer to a private college or university. This difference is quite significant and undoubtedly indicates why there has been an upsurge in public college transfer applicants. However, there is quite a variance in percentages between students attending public community colleges and those attending private junior colleges in relation to financial need. Forty-eight per cent of the community college students said they would need financial aid if they transferred to a public institution, while 36% of the private junior college students said they would need financial aid if they attended a public college or university. There is even a greater variance if they transfer to a private college or university; 69% of the community college students indicated such need as compared with 51% of the private college students.

Financial aid is one of the major problems in transfer articulation, and undoubtedly is one of the main causes for an unreasonably high request for part-time work on the part of first semester transfers. Very few colleges grant financial aid to first semester transfers, some even indicating that transfer students are not eligible for financial aid. In many instances transfer students are not even accepted until very late spring or early summer, and by then all fall semester awards have

already been granted to natively enrolled upperclassmen. Transfer students are definitely discriminated against by many four-year colleges in the area of financial aid awards. Immediate attention needs to be given to current practices at four-year colleges in financial aid in order that these transfer students will be treated fairly and adequately.

Financial aid at two-year colleges: Financial aid awards at the two-year college level are extremely limited, although as one might expect, a higher percentage (30%) of private two-year college students received either singly or in package form scholarship, loans, or work-study assistance, compared with only 17% of the public community college students receiving some form of financial assistance. Although reliable data is not available in this study, the lack of adequate financial aid at the two-year colleges is probably one of the major reasons for a very high percentage of two-year college students who are presently working and plan to work upon transfer to a four-year institution.

Expect to work upon transfer: An unreasonably high percentage of students expects to work at least part-time upon transfer to a four-year college. Sixty-four per cent of the students in this study indicated that they plan to work upon transfer. Also, the number of hours they expect to work is unrealistic. A total of sixty per cent of the students plan to work more than 15 hours a week, with 33% of them planning to work between 16-20 hours a week and 27% more than 20 hours a week. This condition is quite naive for students to hold for two very good reasons: 1) at most institutions, the number of part-time jobs available to undergraduates is extremely limited, and 2) it is academically not sound for transfer students to work excessively long hours while attempting to make a smooth transition academically and personally to a new campus and setting. More communication is needed between four-year and two-year colleges concerning the real financial aid and part-time employment conditions.

Need for vocational counseling: A relatively high proportion of two-year college students seem to need assistance in determining vocational directions at the two-year college level. Thirty-five per cent of the students responded that they did

need vocational advice or counseling. However, the private junior college students indicated that they had less need for vocational counseling (30%) than did the public community college students (37%). This area of service needs to be expanded at the two-year college level and also offered to transfers upon entrance by the four-year colleges.

Present major: Liberal arts programs have the highest percentage (29%) of students enrolled followed by business with 22%, career programs with 8%, general education with 7%, engineering 7%, health services 6%, and fine arts with 3%. Eighteen per cent were enrolled in programs other than those listed above. A comparison between the public community colleges and the private junior colleges shows quite a discrepancy in certain academic areas. There is a much higher percentage (37%) of community college students enrolled in liberal arts than in the private colleges (15%). This probably reflects the emphasis of community colleges in providing liberal arts transfer programs for students planning to transfer to four-year colleges. Another factor that helps explain this difference is the inclusion of two engineering oriented private junior colleges which do not offer liberal arts programs. This conversely explains the difference of percentages in engineering. The community colleges had only 5% in engineering programs compared with 13% in the private colleges.

It should be noted that 28% of the private junior college students indicated that they were enrolled in some other program than those listed on the questionnaire, compared with only 13% of the public community college students.

Table 1

Present Major

	Community Colleges		Private Colleges	
Major	Number	Percent	Number	Percent
Liberal Arts	3543	35.3	676	14.6
Business	2030	20.2	1158	25.0
Career programs	943	9.4	309	6.7
Engineering	444	4.4	614	13.3
Fine Arts	109	1.1	278	6.0
General Education	884	8.8	211	4.6
Health Services	741	7.4	70	1.5
Other	1353	13.4	1310	28.3

In general it can be stated that the two-year colleges do offer a breadth and scope of courses descending in order to enrollment in: liberal arts, business, career programs, general education, engineering, health services, and fine arts. Eighteen per cent indicated that they were enrolled in programs other than those listed on the questionnaire.

Intended major upon transfer: As four-year colleges accept more two-year transfers, they must be aware of the curriculum trends and needs evidenced by these students. This study showed that there are certain programs in great demand, some to a lesser degree, and some virtually ignored. Business was by far the program desired most by these two-year college students. For the total population, the descending order of preference included: business administration (16%), elementary education (8%), engineering (7%), social sciences (6%), nursing (5%), science (4%), art (4%), special education (3%), health services (2%), secondary education (2%), mathematics (1%), and agriculture (1%). Music, home economics, and drama each had less than 1%. Fourteen per cent indicated "other" programs, and fifteen per cent were undecided. Even when the second year students who said they plan to transfer were isolated from the total group, there was not much change in the order of preferred programs. Among these students, nursing dropped from 5th on the preferred list to 9th; secondary education rose from 13th place to the 8th place; art dropped from 7th to 11th place; and humanities rose from 10th to 6th.

Table 2

Intended Major	Community Colleges		Private Colleges	
Major	Number	Percent	Number	Percent
Art	183	2.1	263	6.8
Agriculture	114	1.3	13	.3
Business	1387	15.7	677	17.6
Communications	78	.9	308	8.0
Drama	39	.4	26	.7
Elementary Education	740	8.4	287	7.5
Engineering	403	4.6	493	12.8
Health Services	260	3.0	49	1.3
Home Economics	52	.6	60	1.6
Humanities	303	3.4	40	1.0
Mathematics	137	1.6	27	.7
Music	101	1.1	22	.6
Nursing	508	5.6	90	2.3
Physical Education	233	2.6	95	2.5
Sciences	408	4.6	86	2.2
Secondary Education	221	2.5	52	1.4
Social Sciences	644	7.3	152	3.9
Special Education	293	3.3	104	2.7
Other	1303	14.8	529	13.7
Undecided	1414	16.2	480	12.5

It appears that the two-year colleges should study more closely the curriculum trends of those who wish to transfer to four-year institutions so that adequate and appropriate pre-transfer programs are available. By the same token, the four-year colleges should become more aware of the program preferences of the two-year college students so that they can provide the proper course offerings to meet the needs of the two-year college transfer. This whole area of curriculum articulation needs definite cooperative efforts and mutual communication between both the two-year and four-year institutions in order to make the transition from the two-year colleges to the four-year colleges a relatively smooth one. This is particularly true in relation to transfer credit evaluation. Too often loss of credit, time, and money to the students and the colleges is a result of poor communications and understandings.

Self-reported cumulative grade point averages: The grade point average spread as reported by the students themselves compares quite closely with the normal curve of probability, although there is a slight skew to the right. The percentages for the designated grade point average ranges on a 4.0 scale (4=A, 3=B, 2=C, 1=D, 0=F) include: 4% from 0.0 - 1.6; 12% from 1.7 - 2.0; 33% from 2.1 - 2.6; 26% from 2.7 - 3.0; 18% from 3.1 - 3.5; 7% from 3.6 - 4.0. This data indicates that 84% of the students receive at least a 2.1 or higher grade point average. Normally, the lowest cumulative grade point average that four-year colleges will consider in review for transfer admission is 2.0, although many colleges require a higher GPA for admission. Twenty-five percent attained better than a 3.0 GPA (B's and A's); 59% ranged between a 2.0 - 3.0 GPA (C grades; and 16% were 2.0 and below (lowest C's and D's and F's).
A comparison between the public and private two-year colleges showed very little variance in any of the grade point average ranges.

In general it can be stated that a very high proportion of two-year college students is attaining grades demonstrating that they are performing adequately well academically. This also indicates that the majority of these students is attaining grades that will allow them to transfer to four-year colleges if they

wish.

If transferring, preferred choice of college: One of the prime objectives of this study was to identify the migration patterns of these two-year college students. To what institutions do they wish to transfer? In interpreting this data, it should be noted that for the total population, the responses are based on the question, "If you transfer, which institution is your first choice?" Not every one of the 15,135 who responsed actually plans to transfer. However, 8204 definitely plan to transfer, with 3073 undecided, a good portion of which may decide to transfer. (See Appendix E)

The trends as to where Massachusetts two-year college students wish to transfer are fairly well delineated. Forty percent of the private two-year college students prefer to attend private four-year colleges; 28% prefer to attend state universities, 20% prefer Massachusetts state colleges; 12% prefer to attend other colleges. The public community college students have greatest preference for public institutions: 45% would like to transfer to state universities; 31% to state colleges; and 24% to private four-year colleges.

When combining the public and private two-year college students together, 38% prefer to attend four-year public universities; 30% would prefer to attend private colleges; 28% would like to attend state colleges; and 4% would like to attend other kinds of colleges or institutions.

Very definite transfer admissions strains are placed on certain institutions. The University of Massachusetts at Amherst was the single institution in most demand as 3550 selected it as their first choice college (2932 from public community colleges and 618 from private junior colleges). This kind of pressure from two-year college transfers poses certain problems for the University of Massachusetts at Amherst because it is possible in the near future for the available transfer vacancies to be filled only by two-year college students. If this is the case, what is to happen with the transfer applicants from public and private four-year colleges, as well as those students who wish to transfer to the University from continuing education programs and evening division program? The University of Massachusetts

at Boston with 1191 first choices, Boston State College with 1091, and Salem State College with 975 first choices, all have proportionate transfer admission constraints from two-year college students. Most of the other state colleges individually do not have as great demands made upon them for admission from the two-year college candidates, but some of these state colleges take relatively few transfer students, so that proportionately there is still an admissions strain for the two-year college student. The other two state universities, Southeastern Massachusetts University and Lowell Technological Institute, are not facing as great a demand as the University of Massachusetts.

The private four-year colleges both in-state and out-of-state are very much sought after by both the private and public two-year college students. Twenty-one per cent of private two-year college students would like to attend out-of-state private colleges, and another 20% would like to attend in-state private colleges. This high percentage for out-of-state four-year colleges probably reflects the fact that 39% of all the private two-year college students in this study come from states other than Massachusetts. Twenty-five per cent of the public two-year community college students would like to attend private colleges (17% in-state colleges and 8% out-of-state colleges). In general it can be said that two-year college students wish to fan out to several senior institutions. Particular admissions strains are evident for the University of Massachusetts-Amherst, and the University of Massachusetts-Boston; also, Boston State College, and Salem State College. Although the study did not isolate each of the nearly sixty private four-year colleges in Massachusetts, it is known that Boston University, Northeastern University, Suffolk University, and Bentley College as well as others enroll many two-year transfers.

It would appear prudent to attempt to develop common practices among the various four-year institutions within reasonable limits according to the make-up of the individual college or university, in order to make the transition of the two-year college student from the two-year college to the four-year college as smooth as possible. This in all likihood will necessitate some giving and taking

on the parts of the various colleges, particularly in reference to admissions policies and credit evaluation. It might be well for the Board of Higher Education to request the State Transfer Articulation Committee to develop suggested articulation guidelines for use by Massachusetts' public and private four-year colleges in working with the two-year colleges in the Commonwealth.

SUMMARY AND CONCLUSIONS

The admission of transfer students by four-year colleges has reached major proportions. According to a recently published national report on transfer admission conducted by Warren K. Willingham of the College Entrance Examination Board, [1] "rough estimates indicate that one transfer student enters a senior institution for every three freshmen; of these transfers, over half come from two-year institutions." Needless to say, it is mandatory that the four-year colleges in Massachusetts know and understand well the two-year institution and its students.

This study conducted by the State Transfer Articulation Committee (STAC) attemtped to identify certain demographic and academic characteristics of the two-year college student in Massachusetts.

Demographic characteristics: Typically, the public and private two-year college student in Massachusetts today is a young, non-married, male or female student primarily a resident of Massachusetts, and most likely, entered the two-year college upon graduation from high school. Eighty-seven per cent of these students are less than twenty-four years old, with 59% under the age of twenty. Only 4% are of the "over 30" crowd.

There is a reasonably balanced ratio between males and females, with 52% males and 48% females. Ninety per cent are single; 85% are in-staters (although 39% of the private two-year college students are from out-of-state); and 14% are veterans. Seventy-five per cent entered the community or junior college right out of high school.

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[1] Willingham, Warren K.; The No. 2 Access Problem: Transfer to Upper Division; American Association for Higher Education, Washington D.C.; 1972; P.65

Plan to Transfer: There is no doubt but that the two-year colleges for many students, the public slightly more than the private, serve the role of the first two years of a four-year baccalaureate degree program. Fifty-five per cent said they definitely plan to transfer, and an additional 20% are undecided. Only 25% indicated that they do not plan to transfer. This has major implications for the four-year institutions. With the expected expansion of the two-year colleges, and with a high percentage expecting to transfer to four-year colleges, the senior institutions as a part of the educational hierarchy in Massachusetts must prepare themselves to accommodate these students in all aspects in the years just ahead.

The educational aspirations of these potential transfer students are quite high. While at the community or junior college, 50% expect to obtain an associate in science (A.S.) degree; 30% are seeking an associate in arts (A.A.) degree; and 20% do not plan to get an associate degree. Of those expecting to transfer to a four-year college or university, 41% are aiming for a bachelors degree, 20% for a masters degree, and 5% for a doctorate.

Transfer enrollment trends: Generally speaking, two-year college students fan out to many kinds of four-year institutions. However, typically two-year public community college students prefer to transfer to public four-year colleges, and private two-year college students prefer to matriculate at four-year private colleges.

Fifty-five per cent (8204) stated that they definitely plan to transfer, with 20% (3073) still undecided. It seems safe to estimate that at least 60% of all students in Massachusetts two-year colleges plan to transfer to four-year colleges and universities. This high percentage coupled with the projected expansion of two-year colleges in Massachusetts augurs future enrollment problems for most four-year colleges. Certain public four-year institutions have already great transfer admissions strains placed upon them: the University of Massachusetts-Amherst with a 23% preference, U-Mass-Boston with 8%, Boston State College with 7%, and Salem State College with 6%. Some of the other state institutions, although they don't show a high percentage of demand, take so few two-year students, that proportionately

admissions strains are just as great.

The private four-year colleges are very much in demand by two-year college transfers. Although no data from this study is available for individual private colleges in Massachusetts, 24% of all students responding prefer private colleges for transfer (14% Massachusetts private colleges, and 10% out-of-state private colleges). It is known that many private colleges would like to take more two-year college transfers than they do. In many cases, particularly with public community college students, financial pressures do not allow them to attend private and/or residential four-year colleges.

As the continued pressure for transfer vacancies grows, state agencies, as well as the individual four-year institutions themselves, must face the problem squarely and realistically. There are several possible solutions that can be explored: 1) reduce the size of freshman class enrollment, which at this particular point in time seems to be waning, and enroll more upper-division transfers; 2) provide more financial aid to private institutions or to transfer students who would like to transfer to a private institution; 3) provide more intra-institutional cross-registration programs; 4) develop "upper-division" (junior-senior year only) institutions.

At any rate, immediate attention and action is needed at all higher educational levels in order to prevent future chaos in educating the two-year college students who wish to transfer to four-year institutions.

Financial Aid: At the two-year colleges, financial aid is woefully inadequate. This study did not attempt to determine why it is inadequate. That needs to be studied in more detail. The private two-year colleges do provide more financial assistance (30%) than do the public two-year colleges (17%). Undoubtedly, that is one reason why such a high percentage of two-year college students work part-time (and some even work full-time). This study did not determine work plans while attending the two-year college, but the plans to work upon transfer were shockingly revealed as completely unrealistic. Sixty per cent of the students indicated that they plan to work upon transfer to a four-year institution. Of this group, 60%

plans to work between 15-20 hours a week, and another 27% plan to work more than 20 hours a week. This is unrealistic for two reasons: 1) there are not enough part-time jobs to be had at four-year institutions, and 2) academically it is not sound to work long hours while making a new adjustment to a new educational setting.

More commitment to financial aid for transfer students must be made by two-year and four-year institutions if they are to serve these students without discrimination.

Curriculum Trends: As more and more four-year colleges and universities enroll more and more two-year college transfers, it is essential that upper division curricula needs of these transfer students are known by the four-year colleges. One of the main failures of some "upper-division" colleges that were not able to fill their vacancies, was the lack of insight to provide the right academic programs for the two-year transfer pool from which they drew.

The findings of this study clearly indicate that just liberal arts offerings at the upper-division level are not enough to meet the needs of these students. The professional areas seemed to be in most demand. Business administration topped the list with a preference of 16%, followed by elementary education with 8%, engineering with 7%, social sciences with 6%, and nursing with 5%. All other selected curriculum areas were below 5%. It becomes clear that curriculum articulation between two and four-year institutions is one of the most pressing needs in higher education today - not only in relation to the availability of appropriate courses, but also in terms of transfer credit evaluation. Presently within the Massachusetts four-year colleges there is tremendous inconsistency and many inequities in the evaluation of transfer credit.

At the writing of this report, it is known that the Massachusetts Transfer Review Council has been studying the curriculum articulation problem for the past year, and will make recommendations in order to improve the situation within the coming academic year.

Housing of Transfer Students: Some four-year colleges have no residential hall housing for transfers, while others make it mandatory that transfer students live on campus unless they are twenty-one years of age, or married, or commuting from home. Yet the typical two-year college transfer, like his four-year college peer, generally prefers to live off campus. Only 26% of the transfer population indicated that they wished to live on campus. Whatever the four-year college's policy is, it should be made clearly known to the transfer applicants prior to the time of application. Possibly this information should be taken into account by four-year colleges in relation to the building of more dormitories.

RECOMMENDATIONS

As a result of the findings of this study on the two-year college student in Massachusetts, and with some understanding and knowledge of the transfer articulation process, the Massachusetts State Transfer Articulation Committee recommends that:

1. the Massachusetts Board of Higher Education call a meeting of the heads of both public and private higher education institutions in the state in order to inform and discuss the transfer space dilemma. Solutions should be sought in the immediate future.
2. the State Transfer Articulation Committee, composed of Massachusetts private and public two and four-year college personnel most directly involved with the transfer process, develop and publish "Guidelines for articulation of two-year college students transferring to four-year institutions in Massachusetts." This should be done in order to assist individual institutions in developing or changing policies and procedures related to the transfer process. This would also allow for the possibility of more consistency in dealing with transfer articulation among all institutions within the state.
3. every four-year institution in Massachusetts that accepts even a modest number of two-year college transfers develop and publish a "pre-transfer" information brochure about: admissions, housing, expenses, financial aid, counseling and advising, credit evaluation policies, brief titles of course offerings, and general information on student life. Not only would this assist the student in learning more about the institution, but it would also serve as a vehicle for improved communications between the two-year and four-year institutions.
4. state agencies such as the Transfer Review Council (TRC) study and establish subject matter curriculum articulation guides, recommending an appropriate course program flexible enough so that a student can move in

a given subject matter field from a two-year college through the four-year college in normal progression without loss of time or credit.

5. individual four-year institutions re-assess their financial aid policies concerning awards to transfer students. Transfer students should be as eligible for financial aid based on need as natively enrolled upperclassmen. Also, two-year colleges should find ways of providing more financial aid for their students so that not as much of the students' time will have to be spent on full or part-time employment.
6. the two-year colleges in particular place more emphasis upon career development guidance. The typical two-year college student, possibly because of neglect at the secondary school level, needs assistance in determining his academic strengths and weaknesses, and particularly in finding ways and means of exploring potential career opportunities. The four-year colleges also must assist in this development process, but the two-year college level is most crucial because of the decisions students must make within those two-years. This objective cannot be met be merely placing this added responsibility upon already over-burdened currently employed counselors. It means a commitment on the part of two-year colleges by hiring qualified personnel, and giving them the necessary support services to do the job properly.
7. that central offices and individual institutions, both two- and four-year, establish and maintain an on-going institutional research program related to their respective transfer students, and the articulation process in general.
8. the two-year colleges investigate the possible need of serving the "over-30" crowd better at the day-division level.

Over the past year have come many signs of recognizing the problems facing the two-year college transfer student. Some positive steps have already been taken to improve the overall transfer articulation process. Many problems have not yet

even been touched, such as dealing more effectively with minority group students and making them an integral part of the two-to-four year process. The leadership shown by interested state agencies and individual institutions augurs well for the future of the State of Massachusetts in providing accessible and quality higher education for the two-year college transfer student. The work has just begun, but more must be done.

APPENDIX A

STATE TRANSFER ARTICULATION COMMITTEE

Members

Community Colleges:

Dr. Glenda Lee - Director of Counseling and Research - Middlesex Community College
Mr. Paul Berwick, Jr. - Director of Admissions - Springfield Technical Community College
Mr. Paul Carey - Registrar - Massachusetts Bay Community College
Miss Mary Solomita - Director of Counseling - Cape Cod Community College
Mr. E. Jay Tierney - Director of Admissions and Transfer - Quinsigamond Community College

Private Colleges:

Miss MaryAnn Zammitti - Assistant Director of Admissions - Northeastern University
Mr. Charles Crosby - Assistant Director of Admissions - Boston University
Mr. Rene Durand - Assistant Director of Admissions - Boston College
Mr. Brian Murphy - Director of Admissions - Stonehill College
Mr. William Coughlin - Director of Admissions - Suffolk University
Dr. Barry Fullerton - Dean of Student Affairs - Dean Junior College
Dr. John Bowler - Academic Dean - Fisher Junior College
Dr. Wilmarth Mott III - Dean - Worcester Junior College
Mr. Edward Wall - Dean of Admissions - Amherst College
Dr. Van Halsey - Director of Admissions - Hampshire College

State College System:

Dr. Mary McGauvran - Director of Admissions - Lowell State College
Mr. Edward Zaleskas - Director of Admissions - Boston State College
Dr. Albert E. Goodrich, Jr. - Director of Admissions - Framingham State College
Ms. Jana Matthews - Assistant Director of Administrative Services and Admissions - State College Central Office

University System:

Miss Charlotte Rahaim - Transfer Admissions Officer - University of Massachusetts - Amherst
Mr. Donald Costello - Director of Admissions - University of Massachusetts - Boston (Sec.)
Mr. Lawrence Martin - Assistant Director of Admissions - Lowell Technological Institute
Mr. Barrie Phelps - Director of Admissions - Southeastern Massachusetts University

Dr. Ernest Beals - Director - Office of Transfer Affairs - University of Massachusetts - Amherst (Chairman)

APPENDIX B

SURVEY OF TRANSFER PLANS

NAME: _____ DATE of BIRTH: ___/___/___ (MO) (DAY) (YR) SOC. SEC.# _____

NAME OF PRESENT COLLEGE: _____

ADDRESS OF PRESENT COLLEGE: _____

TODAY'S DATE ___/___/___ (MO) (DAY) (YR)

AGE:
- Under 20
- 20 - 23
- 24 - 29
- 30 - Older

SEX:
- Male
- Female

MARITAL:
- Single
- Married
- Other

RESIDENCE:
- In state
- Out state
- Foreign

VETERAN:
- Vet
- Non-vet

ELIGIBLE FOR VETS BENEFITS
- Yes
- No
- N/A

IMMEDIATELY AFTER HIGH SCHOOL
- College
- Worked
- Marriage
- Service
- Other

DO YOU PLAN TO TRANSFER TO A 4-YEAR INSTITUTION?
- Yes
- No
- Undecided

PLAN TO TRANSFER AFTER
- 1st sem
- 2nd sem
- 3rd sem
- 4th sem
- Uncertain
- Not trans

DO YOU PLAN TO OBTAIN A TWO YEAR DEGREE?
- A A
- A S
- No

EDUCATIONAL ASPIRATION:
- Associates
- Bachelors
- Masters
- Doctorate
- None

EXPECT TO WORK TO SUPPLEMENT FINANCES DURING ACADEMIC YEAR AFTER TRANSFER
- Yes
- No

If yes, how many hours per week
- 1 - 10
- 11 - 15
- 16 - 20
- More than 20

WHY ARE YOU ATTENDING YOUR PRESENT INSTITUTION?
- Preferred 2 yr institution
- Couldn't afford residence college
- Felt wouldn't be accepted at 4 yr inst
- Not accepted at 4 yr institution
- Not accepted at another 2 yr inst
- Need to be near home
- Other

HAVE YOU EVER ATTENDED ANY OTHER COLLEGE?
- 2 yr col full time
- 4 yr col full time
- Summer school
- Evening division
- Summer & evening
- Never

REASON FOR LEAVING PREVIOUS COLLEGE?
- Not applicable
- Dissatisfied
- Academic failure
- Financial reason
- To be near home
- Other

KIND OF LIVING ARRANGEMENTS YOU WOULD PREFER IF YOU TRANSFER
- Res hall
- Sor / Frat
- Off campus
- Commute

WILL YOU NEED FINANCIAL AID IF YOU TRANSFER TO A:

PUBLIC COLLEGE/UNIVERSITY
- Yes
- No

PRIVATE COLLEGE/UNIVERSITY
- Yes
- No

NUMBER OF COURSES YOU PLAN TO REGISTER FOR NEXT SEMESTER
- 1
- 2
- 3
- 4
- 5
- 6

PRESENT MAJOR
- Liberal Arts
- Business
- Career Prog
- Engineering
- Fine Arts
- General
- Health Ser
- Other

INTENDED MAJOR UPON TRANSFER
- Art
- Agriculture
- Business Adm
- Communications
- Drama
- Elementary Ed
- Engineering
- Health Services
- Home Economics
- Humanities
- Math
- Music
- Nursing
- Physical Ed
- Science
- Secondary Ed
- Social Science
- Special Ed
- Other
- Undecided

CAREER GOALS:
(WRITE IN:)

DO YOU NEED VOCATIONAL ADVICE OR COUNSELING?
- Yes
- No

FINANCIAL AID FOR CURRENT SEMESTER:
- Did not apply
- Applied but received none
- Received scholarship
- Received loan
- Rec'd combination package
- Work study
- Applied but have not yet heard

CREDITS EARNED TO DATE
- 0 - 10
- 11 - 20
- 21 - 30
- 31 - 40
- 41 - 50
- + 50

NO. OF JR. COLLEGE SEM COMPLETED
- 1
- 2
- 3
- 4

CUMULATIVE GRADE PT AVG BASED ON INFORMATION ABOVE
- 0.0 - 1.6
- 1.7 - 2.0
- 2.1 - 2.6
- 2.7 - 3.0
- 3.1 - 3.5
- 3.6 - 4.0

IF YOU TRANSFER, WHAT KIND OF INSTITUTION WOULD BE YOUR FIRST, SECOND AND THIRD CHOICES

	1st	2nd	3rd
STATE UNIVERSITIES:			
LOWELL TECH			
SOUTHEASTERN MASS			
UNIV-MASS-AMHERST			
UNIV-MASS-BOSTON			
STATE COLLEGES:			
BOSTON			
BRIDGEWATER			
FITCHBURG			
FRAMINGHAM			
LOWELL			
NORTH ADAMS			
SALEM			
WESTFIELD			
WORCESTER			
MASS SCHOOL OF ART			
MASS MARITIME			
PRIVATE COLLEGE OR UNIV:			
IN MASSACHUSETTS			
OUT OF STATE			
CHURCH AFFILIATED COLL/UNIV:			
IN MASSACHUSETTS			
OUT OF STATE			
OTHER: _____			

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APPENDIX C

PARTICIPATING COLLEGES

Private Two Year Colleges:

Bryant and Stratton College
Cambridge Junior College
Chamberlayne Junior College
Dean Junior College
Endicott Junior College
Franklin Institute of Boston
Garland Junior College
Grahm Junior College
Lasell Junior College
Mount Ida Junior College
Newton Junior College
Wentworth Institute
Worcester Junior College

Public Community Colleges:

Berkshire Community College
Bristol Community College
Cape Cod Community College
Greenfield Community College
Holyoke Community College
Massachusetts Bay Community College
Massasoit Community College
Middlesex Community College
Mount Wachusett Community College
Northern Essex Community College
North Shore Community College
Quinsigamond Community College
Springfield Technical Community College

APPENDIX D

STAC TRANSFER QUESTIONNAIRE

Category Totals

Name of College	Number of Responses of Total Population	Number of Responses of Second Year Students Who Plan to Transfer	Number of Responses of First Year Students Who Plan to Transfer	Number of Responses of Students Who Do Not Plan to Transfer
Berkshire	759	187	292	113
Bristol	617	108	222	161
Cape Cod	444	96	248	26
Greenfield	460	97	169	63
Holyoke	466	101	206	81
Massachusetts Bay	1238	236	519	301
Massasoit	1273	263	536	194
Middlesex	526	76	243	123
Mount Wachusett	603	150	240	106
Northern Essex	553	124	235	80
North Shore	1925	450	642	438
Quinsigamond	148	81	25	23
Springfield Technical	1407	188	384	486
Sub-totals	10,419	2,157	3,961	2,195

APPENDIX D (cont.) Private Colleges

STAC TRANSFER QUESTIONNAIRE

Category Totals

Name of College	Number of Responses of Total Population	Number of Responses of Second Year Students Who Plan to Transfer	Number of Responses of First Year Students Who Plan to Transfer	Number of Responses of Students Who Do Not Plan to Transfer
Bryant-Stratton	542	77	90	224
Cambridge	85	12	53	5
Chamberlayne	230	16	62	86
Dean	246	10	174	26
Endicott	365	78	86	131
Franklin Institute	543	37	65	260
Garland	208	33	41	62
Grahm	945	111	231	307
Lasell	422	45	143	153
Mount Ida	336	44	140	90
Newton	270	76	112	38
Wentworth	281	123	21	71
Worcester	280	85	122	27
Sub-totals	4,753	747	1,340	1,480
Totals	15,172	2,904	5,301	3,675

APPENDIX E

IF TRANSFERRING, PREFERRED CHOICE OF INSTITUTION

Population	STATE UNIVS.				STATE COLLEGES															Other
	LTI	SMU	UMA	UMB	Bost	Bridge water	Fitch burg	Framing ham	Lowell	North Adams	Salem	West field	Worce ster	Mass Art	Mass mari	Priv in Mass	Priv out Mass	Church in Mass	Church out Mass	
Public (N=10,267)																				
Number	274	440	2932	775	702	422	301	143	162	253	857	252	63	94	18	1343	670	424	142	316
% age	2.6	4.2	28.1	7.4	6.8	4.4	2.9	1.4	1.6	2.4	8.2	2.4	0.6	1.0	0.2	12.9	6.4	4.1	1.4	3.0
Rank	11	7	1	4	5	9	10	15	14	12	3	13	18	17	19	2	6	8	16	---
Private (N=4,185)																				
Number	180	96	618	416	389	68	44	83	37	27	118	12	49	119	7	802	823	170	127	367
% age	3.8	2.1	13.0	8.8	8.2	1.4	1.0	1.8	0.9	0.7	2.5	0.4	1.1	2.5	0.2	16.9	17.4	3.4	2.7	7.7
Rank	6	11	3	4	5	13	15	12	16	17	10	18	14	9	19	2	1	7	8	---
Total (N=15,135)																				
Number	454	536	3550	1191	1091	490	345	226	199	280	975	264	112	213	25	2145	1493	594	269	683
% age	3.0	3.5	23.4	7.9	7.2	3.2	2.3	1.5	1.3	1.9	6.4	1.7	0.7	1.4	0.2	14.1	9.8	3.9	1.8	4.5
Rank	10	8	1	4	5	9	11	15	17	12	6	14	18	16	19	2	3	7	13	---

MASSACHUSETTS

STATE TRANSFER ARTICULATION COMMITTEE

A Study of Students
From 13 Public and 13 Private Two-year Colleges in Massachusetts

Total Population N = 15,171

Age	Number	Per Cent
Under 20	8824	58.7
20 - 23	4222	28.1
24 - 29	1400	9.3
30 over	583	3.9
Sex		
Male	6847	52.2
Female	6267	47.8
Marital		
Single	13277	88.5
Married	1463	9.8
Other	262	1.7
Residence		
In State	11417	84.7
Out of State	1890	14.0
Foreign	167	1.3
Veteran Status		
Veteran	1817	14.1
Non-veteran	11039	85.9
Veteran Benefits		
Yes	1788	15.8
No	8508	75.1
N/A	1035	9.1

APPENDIX F

STAC report

After High School	Number	Per Cent
College	11102	74.6
Worked	2152	14.5
Marriage	212	1.4
Service	985	6.6
Other	434	2.9
Plan to Transfer		
Yes	8204	54.9
No	3675	24.6
Undecided	3073	20.5
Plan to Transfer after Which Semester		
One	91	.6
Two	881	6.2
Three	279	1.9
Four	6038	42.5
Uncertain	4002	28.2
Not Transferring	2923	20.6
Do you Plan to Obtain a Two-Year Degree		
A.A.	4186	30.5
A.S.	6902	50.3
No	2637	19.2
Educational Aspirations		
Associate degree	3919	27.7
Bachelor's degree	5799	40.9
Master's degree	2766	19.5
Doctorate	643	4.5
None	1031	7.4

Why attending Present College	Number	Per Cent
Preferred two-year institution	6127	41.6
Could not afford residence college	1730	11.8
Felt would not be accepted at four-year college	1682	11.4
Not accepted at four-year college	1348	9.2
Not accepted at another two-year institution	38	.3
Need to be near home	1059	7.2
Other	2732	18.5
Ever Attended Another College		
Two-year College full-time	754	5.1
Four-year College full-time	1169	8.0
Summer School	327	2.2
Evening Division	598	4.1
Summer and Evening	204	1.4
Never	11583	79.2
Reason for Leaving Previous College		
Not Applicable	3683	48.9
Dissatisfied	1050	13.9
Academic Failure	390	5.2
Financial Reason	265	3.5
To be Near Home	98	1.3
Other	2041	27.2

	Number	Per Cent
Kind of Living Arrangements Preferred if you Transfer		
Residence Hall	3385	26.3
Sorority/Fraternity	580	4.5
Off Campus	5076	39.5
Commute	3826	29.7
Will you need Financial Aid if you Transfer to a Public College		
Yes	5542	44.4
No	6941	55.6
Will you need Financial Aid if you Transfer to a Private College		
Yes	6341	62.7
No	3775	37.3
Financial Aid for Current Semester		
Did not Apply	10005	73.9
Applied but received none	377	2.8
Received Scholarship	1060	7.8
Received Loan	986	7.3
Received Combination Package	350	2.6
Work Study	505	3.7
Applied but have not Heard	248	1.8
Expect to Work to Supplement Finances During Academic Year after Transfer		
Yes	8596	63.9
No	4855	36.1

	Number	Per Cent
If expect to Work, How Many Hours per Week		
5 - 10	1035	12.4
11 - 15	2298	27.5
16 - 20	2737	32.7
More than 20	2290	27.4
Need Vocational Counseling		
Yes	4343	34.8
No	8142	65.2
Present Major		
Liberal Arts	4218	28.7
Business	3188	21.7
Career Program	1252	8.5
Engineering	1058	7.2
Fine Arts	387	2.6
General	1095	7.5
Health Services	811	5.5
Other	2663	18.3
Intended Major upon Transfer		
Art	446	3.5
Agriculture	127	1.0
Business Administration	2065	16.3
Communications	386	3.0
Drama	65	.5
Elementary Education	1027	8.1
Engineering	896	7.1
Health Services	309	2.4
Home Economics	112	.9

Intended Major upon Transfer, Con't.	Number	Per Cent
Humanities	343	2.7
Math	164	1.3
Music	123	1.0
Nursing	598	4.7
Physical Education	325	2.6
Science	495	3.9
Secondary Education	273	2.1
Social Science	796	6.3
Special Education	397	3.1
Other	1833	14.5
Undecided	1894	15.0
No. of Courses you Plan to Register for Next Semester		
One	165	1.3
Two	297	2.3
Three	450	3.4
Four	2396	18.3
Five	8465	64.7
Six	1314	10.0
Credits Earned to Date		
0 - 10	1064	8.2
11 - 20	5079	39.3
21 - 30	1114	8.6
31 - 40	1260	9.8
41 - 50	2622	20.3
Over 50	1782	13.8

	Number	Per Cent
Number of Semesters Completed		
One	5837	47.1
Two	1471	11.9
Three	4040	32.6
Four	1052	8.4
Cum. Average based on Information Above		
0.0 - 1.6	464	3.7
1.7 - 2.0	1501	12.0
2.1 - 2.6	4183	33.4
2.7 - 3.0	3204	25.5
3.1 - 3.5	2311	18.4
3.6 - 4.0	876	7.0
Choice of College for Transfer		
State Universities		
Lowell Tech		
First	454	3.0
Second	450	3.0
Third	600	4.0
Southeastern Mass		
First	536	3.5
Second	676	4.5
Third	947	6.2
Univ. of Mass. - Amherst		
First	3550	23.4
Second	1836	12.1
Third	1106	7.3

Choice of College, Con't.	Number	Per Cent
Univ. of Mass. - Boston		
First	1191	7.8
Second	1485	9.8
Third	1061	7.0
State Colleges		
Boston State		
First	1091	7.2
Second	1419	9.3
Third	966	6.4
Bridgewater State		
First	490	3.2
Second	582	3.8
Third	505	3.3
Fitchburg State		
First	345	2.3
Second	451	3.0
Third	463	3.0
Framingham State		
First	226	1.5
Second	447	2.9
Third	498	3.3
Lowell State		
First	199	1.3
Second	377	2.5
Third	359	2.4

Choice of College, Con't.	Number	Per Cent
North Adams State		
First	280	1.8
Second	382	2.5
Third	372	2.4
Salem State		
First	975	6.4
Second	959	6.3
Third	834	5.5
Westfield State		
First	264	1.7
Second	445	2.9
Third	397	2.6
Worcester State		
First	112	.7
Second	260	1.7
Third	372	2.4
Mass. School of Art		
First	213	1.4
Second	204	1.3
Third	208	1.4
Massachusetts Maritime		
First	25	.2
Second	55	.4
Third	159	1.0

Choice of College, Con't.	Number	Per Cent
Private College or University		
In Massachusetts		
First	2145	14.1
Second	1223	8.1
Third	1235	8.1
Out of State		
First	1493	9.8
Second	1260	8.3
Third	995	6.6
Church-Affiliated College		
In Massachusetts		
First	594	3.9
Second	231	1.5
Third	324	2.1
Out of State		
First	269	1.8
Second	410	2.7
Third	314	2.1
Other		
First	683	4.5
Second	263	1.7
Third	376	2.5